1. A multiport network device comprising:

a plurality of receive ports configured to receive frames in a packet-switched network, the frames each having a source field indicating the source of the frame and a destination field indicating an intended destination for the frame;

a plurality of transmit ports configured to transmit the frames in the packet-switched network;

a time-stamping component connected to receive the frames from the plurality of receive ports, the time-stamping component appending a time-stamp value to the received frames that correspond to voice transmissions; and

output queues corresponding to the transmit ports and connected to receive the frames from the output of the time-stamping component, the output queues forwarding the received frames to appropriate ones of the transmit ports, the output queues expediting the forwarding of the received frames that have appended time-stamp values after a predetermined period of time has elapsed from the time-stamp value.

2. The multiport network device of claim 1, further comprising:

an internal rules checking circuit coupled to the receive ports and configured to determine frame forwarding information that indicates from which of the plurality of transmit ports the received frames should be transmitted, the internal rules checking circuit tagging the frame forwarding information to indicate whether the frame corresponding to the frame forwarding information carries voice data.

3. The multiport network device of claim 2, wherein the internal rules checking circuit tags the frame forwarding information to indicate whether the frame

corresponding to the frame forwarding information carries voice data based on the source of the frame.

4. The multiport network device of claim 2, wherein the internal rules checking circuit tags the frame forwarding information to indicate whether the frame corresponding to the frame forwarding information carries voice data based on an indication set in the frame that the frame should be treated as a real-time frame.

5. The multiport network device of claim 1, wherein each of the output queues further comprises:

write side FIFO queues configured to receive the frames from an output of the time-stamping component;

read side FIFO queues configured to transmit the frames received by the write side FIFO queue to the transmit port corresponding to the output queue; and

an overflow engine connected between the write side FIFO queues and the read side FIFO queues, the overflow engine configured to input the frames from the write side FIFO queues and, when space is available in the read side FIFO queues, write the input frames to the read side FIFO queues, and when space is not available in the read side FIFO queues, write the input frames to an external memory.

6. The multiport network device of claim 5, wherein the overflow engine transfers frames from the external memory to the read side FIFO queues when space becomes available in the read side FIFO queues.

7. The multiport network device of claim 5, wherein each of the output queues further comprises:

a time-stamp control component connected to the overflow engine and the external memory, the time-stamp control component expediting the forwarding of the received frames that have the appended time-stamp values after the predetermined period of time has elapsed by signaling the overflow engine to write the input frames in which the predetermined period of time has elapsed to the read side FIFO queues as soon as space is available in the read side FIFO queues.

8. The multiport network device of claim 7, wherein the time-stamp control component includes a table having entries that each includes the time stamp value of the frame and a pointer to the location of the frame forwarding information in the external memory.

9. The multiport network device of claim 5, wherein each of the write side FIFO queues comprises:

a high priority FIFO queue for queuing high priority frame forwarding information from the output of the time-stamping component; and

a low priority FIFO queue for queuing low priority frame forwarding information from the output of the time-stamping component.

10. The multiport network device of claim 5, wherein each of the read side FIFO queues comprises:

a high priority FIFO queue for queuing high priority frame forwarding information before transmitting the high priority frames to the transmit port; and

a low priority FIFO queue for queuing low priority frame forwarding information before transmitting the low priority frames to the transmit port.

11. A method of processing packets in a network device comprising:

receiving frames at the network device, the frames including a source field indicating a source of the frame and a destination field indicating an intended destination for the frame;

determining whether each of the received frame includes associated voice information;

appending a time stamp value to received frames associated with the voice information;

receiving the frames in an output queue associated with a transmission port of the network device; and

expediting processing of the received frames, which have the appended time stamp values, in the output queue after a predetermined period of time has elapsed since the time stamp value.

12. The method of claim 11, wherein receiving the frames in the output queue further includes writing frames to an external memory when a read side portion of the output queue is full.

13. The method of claim 12, wherein expediting processing of the received frames that have the time stamp values includes writing the frames in which the predetermined period of time has elapsed to the read side portion of the output queue as soon as space is available in the read side portion of the output queue.

14. The method of claim 11, wherein determining whether each of the received frames includes associated voice information includes checking a tag associated with the received frame.

15. The method of claim 14, further comprising:

determining frame forwarding information that indicates from which of a plurality of transmit ports of the network device the frame should be transmitted.

16. The method of claim 15, further comprising:

tagging the frame forwarding information to indicate whether the frame corresponding to the frame forwarding information carries voice data based on the source of the frame.

17. The method of claim 15, further comprising:

tagging the frame forwarding information to indicate whether the frame corresponding to the frame forwarding information carries voice data based on an indication set in the frame that the frame should be treated as a real-time frame.

18. A system for processing packets in a network device comprising:

means for receiving frames at the network device, each of the frames including an indication of whether the frame includes voice data;

means for appending a time stamp value to the received frames that include voice data;

means for queuing the received frames for each of a plurality of transmission ports of the network device; and

means for expediting processing of the received frames that have appended time stamp values after a predetermined period of time has elapsed since the time-stamp value.

19. The system of claim 18, wherein the means for queuing includes:

means for writing the received frames to an external memory when a read side portion of the means for queuing is full.

20. The system of claim 18, wherein the means for expediting processing of the received frames that have appended time stamp values includes:

means for writing the frames in which the predetermined period of time has elapsed to the read side portion of the means for queuing as soon as space is available in the read side portion of the means for queuing.